

**GUJARAT TECHNOLOGICAL UNIVERSITY (GTU)****Competency-focused Outcome-based Green Curriculum-2021 (COGC-2021)**

Semester-IV

**Course Title: Traditional Printing and Design**

(Course Code: 4345905)

Diploma Programme in which this course is offered	Semester in which offered
Textile Design	4 <sup>th</sup> semester

**1. RATIONALE**

India has the long history and rich heritage of the textile. Once a time India was pioneer to cater the need of textile to entire world. Traditional Textile or art is the process of making the creative art piece by using different natural resource and on traditional way. The traditional textile includes woven, embroidery and resist style those techniques which are used to embellish or decorate textiles by dyeing and printing to add color and pattern. Embroidery and other types of needle work, tablet weaving. Various techniques printing and painting, sewing, and tailoring, as well as the tool used like looms and sewing needles etc. Different techniques employed like Bandhani and batik and the object made such as dresses, saree and shirt etc. All these items are under the category of traditional arts. Textile designers are expected to be aware of creating various such designs on textiles to create variety, attraction, good looks, and aesthetics. Traditional textile plays pivotal role in development for the ethnic and fusion based textile products. Traditional textile has major role in today's Indian market especially in religious and ritual functions. In today's global market traditional textile contribute in value addition in textile.

**2. COMPETENCY**

The course content should be taught and implemented with the aim to develop different types of skills leading so that students are able to acquire following competency.

**To create new innovative, creative, ethnic and fusion based new garment by using various techniques to construct decorative textile and understand various aspects of the traditional textile.**

**3. COURSE OUTCOMES (COs)**

The practical exercises, the underpinning knowledge and the relevant soft skills associated with this competency are to be developed in the student to display the following COs:

- a) Identify the different types of the traditional textiles.

- b) Understand basic method for traditional textile production i.e. woven, embroidery and resist style, etc.
- c) Apply concept of fusion in textile design.
- d) Appreciate the new techniques for ethnic wear and textile design.

#### 4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme (In Hours)			Total Credits (CI+T/2+P/2)	Examination Scheme				Total Marks
L	T	P		Theory Marks		Practical Marks		
			C	CA	ESE	CA	ESE	
03	-	02	4	30	70	25	25	150

(\*): Out of 30 marks under the theory CA, 10 marks are for assessment of the micro-project to facilitate integration of COs and the remaining 20 marks is the average of 2 tests to be taken during the semester for assessing the attainment of the cognitive domain UOs required for the attainment of the COs.

**Legends:** L-Lecture; T – Tutorial/Teacher Guided Theory Practice; P -Practical; C – Credit, CA - Continuous Assessment; ESE -End Semester Examination.

#### 5. SUGGESTED PRACTICAL EXERCISES

The following practical outcomes (Pros) are the sub-components of the COs. These Pros need to be attained to achieve the Cos.

S. No.	Practical Outcomes (ProS)	Unit No.	Approx. Hrs. required
1.	Make chart of different traditional textile.	1	02
2.	Make list of different traditional textile material used in making process.	1	02
3.	Make Bandhani and batik by using resist style method and use natural resources.	5	02
4.	Make Ajarak and Ikat by using resist style and use natural resources.	5	03
5.	Make Katazome and Bagru print by using resist style and use natural resources.	5	02
6.	Make Block print and bagh block print by using wooden block and natural colourant material.	3	03
7.	To understand Matani pachedi and Dabu print on cotton fabric by using natural colorant material.	4	02
8.	To understand Kalamkari and Madhubani art on silk fabric by using natural colourant material.	4	02
9.	To understand Rogan art and Pabuji ni phad on natural fibre fabric.	3	02
10.	Make kantha and chamba roomal embroidery by using cotton yarn.	2	02
11.	Make metal zardoshi on cotton and phulkari embroidery on	2	02

	khaddar.		
12.	To understand Pashmina shawl and Jamdani from natural fibre.	2	03
			28

**Note**

- i. More **Practical Exercises** can be designed and offered by the respective course teacher to develop the industry relevant skills/outcomes to match the COs. The above table is only a suggestive list.
- ii. The following are some **sample** 'Process' and 'Product' related skills (more may be added/deleted depending on the course) that occur in the above listed **Practical Exercises** of this course required which are embedded in the COs and ultimately the competency..

S. No.	Sample Performance Indicators for the PrOs	Weightage in %
1	Students' understanding and mastery indifferent type of traditional textile material and their uses.	20
2	Implementation of various techniques used to produce different type of traditional textile.	20
3	Willingness and attitude to complete different assignment	10
4	Initiative regarding innovative way to complete the assignment	20
5	Overall preparedness and progress during the assignment.	30
<b>Total</b>		<b>100</b>

**6. MAJOR EQUIPMENT/ INSTRUMENTS AND SOFTWARE REQUIRED**

These major equipment with broad specifications for the Pros is a guide to procure them by the administrators to usher in uniformity of practical in all institutions across the state.

S. No.	Equipment and Tool Name with Broad Specifications	PrO. No.
1	Needles of different sizes	3,4,9
2	Scissors and cutter	3,5,9,11,12
3	Wooden hand loom	12
4	Metallic rods different sizes	3,7,9,11
5	Wooden frame (Khatli)	3,7,10,11
6	Wooden and metallic ring	3
7	Sewing machine	5,10,11,12
8	Printing table and block	6,7,8,
9	Natural colourant material and clay	3,4,5,6,7,8,9,10,11, 12
10	Badla, sequence and metallic wire	11
11	Kharal, challah and Handiyo	9

12	Mud, gum, stencil paper, and resist pate.	4,5,7,
13	Different size of brushes	3,5,7,8,9
14	Card board, clip , pin	1

## 7. AFFECTIVE DOMAIN OUTCOMES

The following **sample** Affective Domain Outcomes (ADOs) are embedded in many of the above mentioned COs and PrOs. More could be added to fulfil the development of this course competency.

- Follow safety practices.
- Practice good housekeeping.
- Demonstrate working as a leader/a team member.
- Maintain tools and equipment
- Follow ethical practices.

The ADOs are best developed through the laboratory/field based exercises. Moreover, the level of achievement of the ADOs according to Krathwohl's 'Affective Domain Taxonomy' should gradually increase as planned below:

- 'Valuing Level' in 1<sup>st</sup> year
- 'Organization Level' in 2<sup>nd</sup> year.
- 'Characterization Level' in 3<sup>rd</sup> year.

## 8. UNDERPINNING THEORY

The major underpinning theory is given below based on the higher level UOs of *Revised Bloom's taxonomy* reformulated for development of the COs and competency. If required, more such UOs could be included by the course teacher to focus on attainment of cOs and competency.

**Note:** *The Unit Outcomes (UOs) need to be formulated at different level of Revised Bloom's Taxonomy' to accelerate the attainment of the COs and the competency.*

Unit	Unit Outcomes (UOs) (4 to 6 UOs at different levels)	Topics and Sub-topics
<b>Unit I</b> <b>Scenario of Indian traditional textile</b>	1a. Define traditional textile. 1b. Describe different traditional textile Materials. 1c. Explain use of different Traditional textile Materials. 1d. Create different garment using different Materials & techniques.	1.1 History of different traditional textile material. 1.2 Changes in traditional textile over the period of time. 1.3 Basic principle for traditional textile and its motif.
<b>Unit II</b> <b>Woven and embroidery traditional textile</b>	2a. Explain techniques of ancient weaving and embroidery techniques. 2b. Use different embroidery style in garment. 2c. Prepare new fabric design surface by applying different embroidery patterns.	1.1 History of different states embroidery. 1.2 Changes in embroidery pattern over the period of time 1.3 Basic principle for tradition weaving pattern. 1.4 Different types and uses of traditional Textile. 1.5 Traditional textile design Exercises

Unit	Unit Outcomes (UOs) (4 to 6 UOs at different levels)	Topics and Sub-topics
		based on different Techniques.
<b>Unit III</b> <b>Printed traditional textile</b>	3a. Explain different techniques of Traditional printing. 3.b Explain techniques of Block printing. 3c. Use different natural materials for making traditional printing.	3.1 Combination of different color and Different motifs in traditional printing. 3.2 Block printing and motif used. 3.3 Bagh block printing and natural colour uses in process. 3.4 Different uses of the printing textile. 3.5 Different creative techniques and idea for printing textile.
<b>Unit IV</b> <b>Painted traditional textile</b>	4a. Create variety of paintings According to their uses in textiles. 4b. Develop new designs in context to traditional textile. 4c. Combined traditional and New techniques of painting for current trends. 4d. Develop new painting textile for fusion garment.	4.1 Panting according to the traditional Method. 4.2 Painting as a new development in current market. 4.3 Painting textile by using natural colour like vegetable, fruits, flower etc. 4.5 Combination of textile painting with other traditional textile like embroidery, block, bandhani etc.
<b>Unit V</b> <b>Resist style textile</b>	5a. Create different effect on fabric by using different resist style techniques. 5b. Create different texture effect on surface of the fabric. 5c. Different uses of the resist textile in fashion industry. 5d. Combine stencil and resist style to make katazome printing.	5.1 Create new pattern by using wax and tie and die techniques. 5.2 Make double ikat by warp and weft techniques. 5.3 Create Ajarak pattern by using natural colorant material. 5.4 Combination of resist mud and block to create bagru and dabu print textiles.

### 9. SUGGESTED SPECIFICATION TABLE FOR QUESTION PAPER DESIGN

Unit No.	Unit Title	Teaching Hours	Distribution of Theory Marks			
			R Level	U Level	A Level	Total Marks
I	Introduction and Scenario of indian traditional textile	05	05	02	00	07
II	Woven and embroidery traditional textile	10	04	04	07	15
III	Printing traditional textile	08	04	04	07	15

IV	Painting traditional textile	07	04	04	07	15
V	Resist style textile	12	05	06	07	18
		42	22	20	28	70

**Legends:** R=Remember, U=Understand, A=Apply and above (Revised Bloom's taxonomy)

**Note:** This specification table provides general guidelines to assist students for their learning and to teachers to teach and question paper designers/setters to formulate test items/questions to assess the attainment of the UOs. The actual distribution of marks at different taxonomy levels (of R, U and A) in the question paper may slightly vary from above table.

## 10. SUGGESTED STUDENT ACTIVITIES

Other than the classroom and laboratory learning, following are the suggested student-related **co-curricular** activities which can be undertaken to accelerate the attainment of the various outcomes in this course: Students should perform following activities in group and prepare reports of about 5 pages for each activity. They should also collect/record physical evidences for their (student's) portfolio which may be useful for their placement interviews:

- a) Visit traditional textile manufacturing unit / boutique.
- b) Undertake micro-projects of making various traditional textile making process.
- c) Develop new products by collaboration with Rural Artist.
- d) Visit various mela, exhibitions and gallery and make a report and documentary for the same

## 11. SUGGESTED SPECIAL INSTRUCTIONAL STRATEGIES (if any)

These are sample strategies, which the teacher can use to accelerate the attainment of the various outcomes in this course:

- a) Massive open online courses (**MOOCs**) may be used to teach various topics/sub topics.
- b) Guide student(s) to take micro-projects.
- c) Blend the basic concepts with more specialized instruction
- d) Visualization, Cooperative Learning, inquiry based instruction, differentiation, effective use of technology, think-pair and share etc. pedagogies can be implemented as per the enlisted course outcomes.
- e) Give at least 10 competitive problems for each course outcomes of this course
- f) Practice, practice and practice - expose students to wide range of problems
- g) About **20% of the traditional textile articles should be made by** students for **self-learning**, but to be assessed using different assessment methods.
- h) Using the natural resources and create new traditional textile. Also motivate the students for the self-enterprise (Own small start-up) which help to generate employability.

- i) Guide students on how to address issues on environment and sustainability using the knowledge of this course

## 12. SUGGESTED MICRO-PROJECTS

**Only one micro-project** is planned to be undertaken by a student that needs to be assigned to him/her in the beginning of the semester. In the first four semesters, the micro-project are group-based (group of 3 to 5). However, **in the fifth and sixth semesters**, the number of students in the group should **not exceed three**.

The micro-project could be industry application based, internet-based, workshop-based, laboratory-based or field-based. Each micro-project should encompass two or more COs which are in fact, an integration of PrOs, UOs and ADOs. Each student will have to maintain dated work diary consisting of individual contribution in the project work and give a seminar presentation of it before submission. The duration of the micro-project should be about **14-16 (fourteen to sixteen) student engagement hours** during the course. The students ought to submit micro-project by the end of the semester to develop the industry-oriented COs.

A suggestive list of micro-projects is given here. This has to match the competency and the COs. Similar micro-projects could be added by the concerned course teacher:

### Suggested List of Micro-Project.

1. New product development by using different traditional textile concepts.
2. Arrange an exhibition for the traditional textile to motivate the people for purchase.
3. Make collection of different traditional textile and make some new fusion textile and develop new idea for the traditional textile.

## 13. SUGGESTED LEARNING RESOURCES

S. No.	Title of Book	Author	Publication with place, year and ISBN
1	5000 Years of Arts and Crafts in India and Pakistan	Shanti Swarup	D.B. Taraporevala, Bombay, First edition, January-1, 1968 ISBN : Does not apply
2	Decorative Design and Craftsmanship of India with over 10,000 design and motifs <b>From the craft of India</b>	Kamala Devi Chattopadhyay	KalyaniPublishers ,2008 ISBN:9788127244149
3	Oriental carpet design (A guide to traditional motifs, patterns and symbols)	P.R.J.Ford	Thames and Hudson-1992, ISBN:9780500276648
4	Embroidered Textiles (Traditional pattern)	Sheila Paine	Thames and Hudson-1990, ISBN:9780500235973

	from five continents)		
5	Stenciling made easy (A complete beginner's guide)	Joanna sheen	Haldane mason, London-1995 ISBN:0-7525-1087-8
6	Ikat textiles of India	Chelna Desai	Chrpnicle india, California ISBN : 0-87701-548-1
7S	Studies in Indian Textiles	V. Suguna Sarma	Bharatiya Kala Prakashan 81-86050-13-2
8	5000 Years of Textiles	Jennifer Harris	British museum, London ISBN : 0-7141-1715-3
9	Roop Sanhita Design through the ages	Vasudeo Smart	Smt. Pramila Vasudeo Smart
10	Indian Painted and printed fabrics	John Irwin & Margaret Hall	Vakil & sons private limited
11	Embroidered Textiles	Sheila Paine	Thames and Hudson 0-500-23597-X
12	Tie-dyed textiles of india	Veronica murphy and rosemary crill	Victoria and albert museum in association with Mapin publishing pvt.ltd
13	Materpieces of Indian Textiles	Rustam J. Mehta	D.B.Taraporewala sons & co. Private ltd.
14	Traditional Indian Textiles	John Gillow Nicholas Barnard	Thames and Hudson 0-500-27709-5
15	Indian Pigment Paintings on Cloth	Kay talwar & Kalyn Krishna	Vakil & sons Limited

#### 14. SUGGESTED LEARNING WEBSITES

- a) <https://medium.com>
- b) <https://textilevaluechain.in>
- c) <https://www.textilesphere.com>
- d) <https://textilesfindia.in>
- e) <http://www.craftmark.org>
- f) <https://dsource.in>
- g) <https://www.fibre2fashion.com>
- h) <https://www.tourmyindia.com>
- i) <https://dsource.in>
- j) <http://www.craftmark.org>

## 15. PO-COMPETENCY-CO MAPPING

Semester:- IVth	Traditional Printing and Design						
	POs						
Competency & Course Outcomes	PO 1 Basic & Discipline specific knowledge	PO 2 Problem Analysis	PO 3 Design/ development of solutions	PO 4 Engineering Tools, Experiment-Tation&Testing	PO 5 Engineering practices for society, sustainability & environment	PO 6 Project Management	PO 7 Life-long learning
To create new innovative, creative, ethnic and fusion based new garment by using various techniques to construct decorative textile and understand various aspects of the traditional textile.							
<b>Course Outcomes</b>							
CO a)	3	1	1	-	1	-	3
CO b)	3	2	1	1	2	1	3
CO c)	3	3	3	2	3	2	3
CO d)	3	3	3	2	3	1	3

Legend: '3' for high, '2' for medium, '1' for low and '-' for no correlation of each CO with PO.

## 16. COURSE CURRICULUM DEVELOPMENT COMMITTEE

### GTU Resource Persons

Sr. No.	Name and Designation	Institute	Contact No.	Email
1.	Mr. M V Kanani, Lecturer	GPG Surat	9924185525	mvkanani12345@gmail.com
2.	Mrs. P P Rana, Lecturer	GPG Surat	8460371987	pprana.81@gmail.com